

Further analyses of Medicare procedures provided in multiple ambulatory settings

Technological advances in medical procedures, drugs, and devices have made it possible to deliver in a variety of ambulatory settings many medical services that were once limited to inpatient hospital care. For example, cataract surgery can be provided in both hospital outpatient departments (OPDs) and ambulatory surgical centers (ASCs). Medicare's payment rates for the same service usually vary across settings. Is that appropriate? Should payment rates for the same service vary based on cost differences among settings or should the rates be uniform across sites of care, adjusting for differences in patient mix?

To begin addressing these policy issues, the Commission contracted with RAND Health to conduct two studies to explore the following analytical questions:

- Do the types of patients who receive a service differ systematically by setting?
- Does the nature of a service vary based on the setting in which it is provided?
- Does quality of care vary by setting?

In its first study, RAND conducted a literature review and convened expert panels of physicians to identify patient and adverse outcome measures for three high-volume services performed in multiple ambulatory settings: cataract surgery, colonoscopy, and magnetic resonance imaging (MRI) of the head, neck, and brain. RAND also explored the feasibility of using Medicare claims data to measure the indicators. This study is available at

http://medpac.gov/publications/contractor_reports/Oct04_ASC_Rpt_intro.pdf.

RAND conducted a second study of the same three procedures to address two questions:

1. Are certain settings more likely to have patients with characteristics that might increase the cost of performing the procedure?
2. Are there significant differences among settings in the risk-adjusted rates of adverse outcomes following the procedure?

To examine the first question, RAND selected clinical experts to help identify patient characteristics that might increase the facility cost of each procedure (i.e., the non-professional portion of the service). For example, it may take longer (and therefore cost more) to obtain consent from and explain post-surgical care to patients with dementia. These characteristics were not formally evaluated by large panels of clinical experts, nor did RAND quantify the relationship between each characteristic and cost differences. To explore the second question, RAND selected adverse outcomes for each procedure based on their incidence, preventability, severity, and whether they could be differentiated from a patient's pre-existing condition. Rates of adverse outcomes in each setting were adjusted for several patient factors, including demographic characteristics and comorbidities.

Based on the three services examined, the study makes the following conclusions:

- Rates of most patient characteristics that might increase the cost of performing one of the three services were very low in all settings; the vast majority of characteristics were present in fewer than 10 percent of patients.
- Looking across all three services and settings, no single setting had consistently higher rates of characteristics that might increase the cost of the procedure. Where

statistical differences existed, OPD patients had higher rates of characteristics than ASC patients for cataract surgery and colonoscopy, but patients treated in physician offices and testing facilities had higher rates of certain characteristics for MRI of the head, neck, and brain.

- Rates of adverse outcomes were very low in all settings, and the magnitude of significant differences among settings was quite small.

Because the study examined only three procedures, it is difficult to draw general conclusions. Nevertheless, this study demonstrates that claims data can be used to evaluate differences among sites of care and is thus an important step in addressing whether payment variations among settings are appropriate. The final report is available at http://medpac.gov/publications/contractor_reports/OCT06_Multiple_Ambulatory_CONTRACTOR.pdf.

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